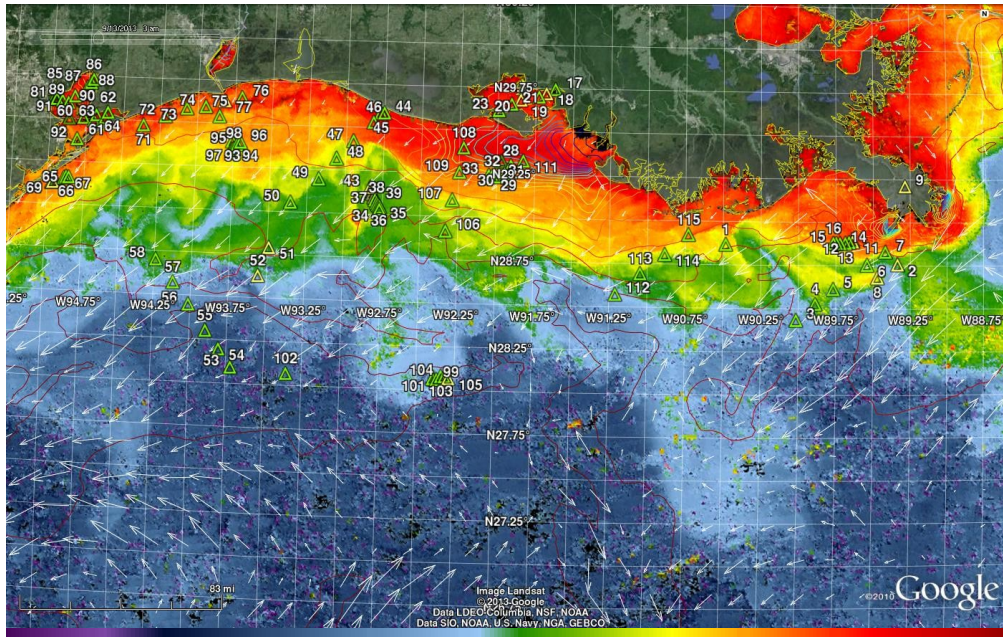


# Matchups

# MATCHUP : Spectral Response

NASA - GEOCAPE  
09/10/13 - 09/22/13

Ondrusek et al. Cal/Val

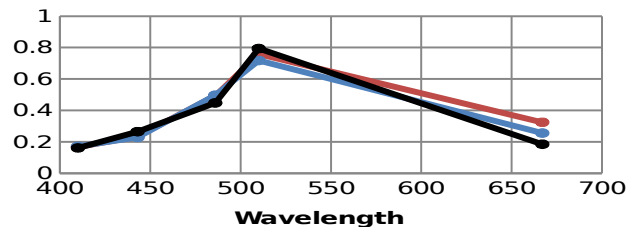


0.01 0.054 0.29 1.6 8.4 45  
Chlorophyll Concentration ( $\text{mg m}^{-3}$ ), OC3 algorithm

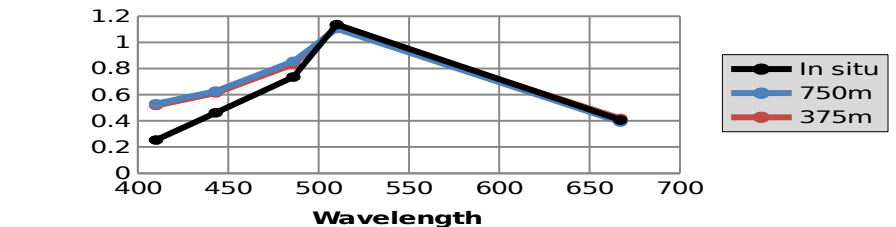
(mW cm<sup>-1</sup> um<sup>-1</sup> sr<sup>-1</sup>)

(mW cm<sup>-1</sup> um<sup>-1</sup> sr<sup>-1</sup>)

**9/10/13 - 2047 GMT GEOCAPE**



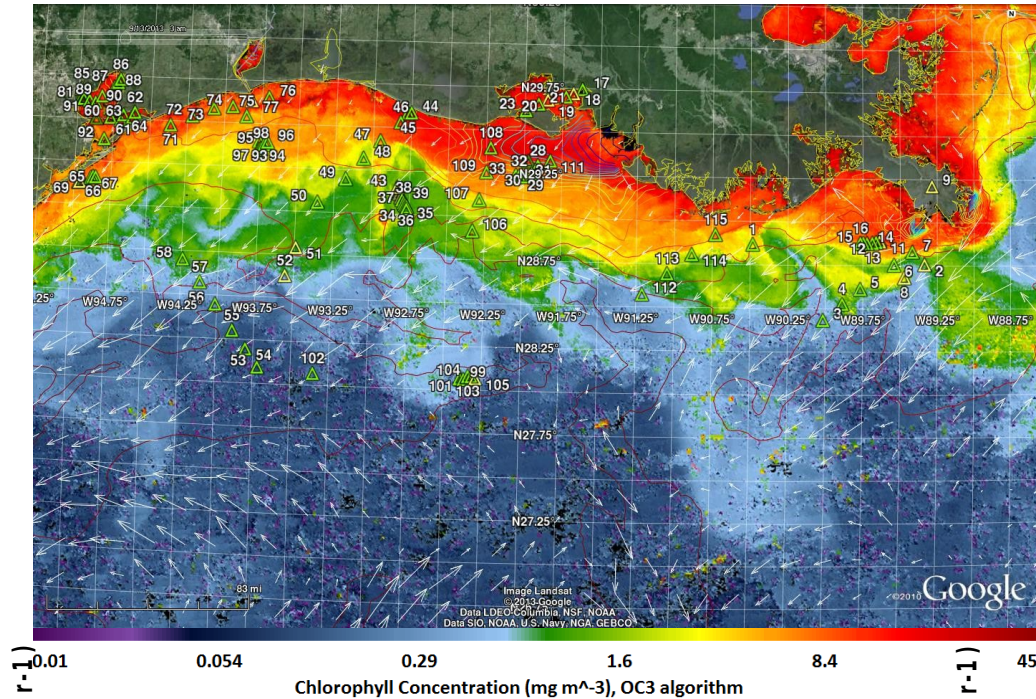
**9/11/13 - 1916 GMT GEOCAPE**



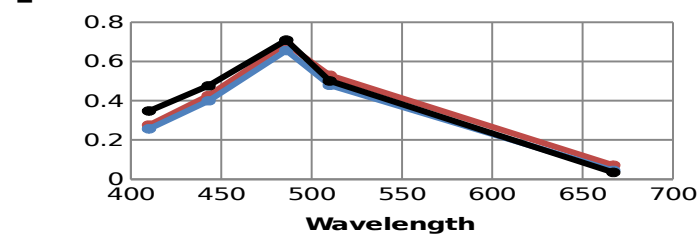
# MATCHUP : Spectral Response

NASA - GEOCAPE  
09/10/13 - 09/22/13

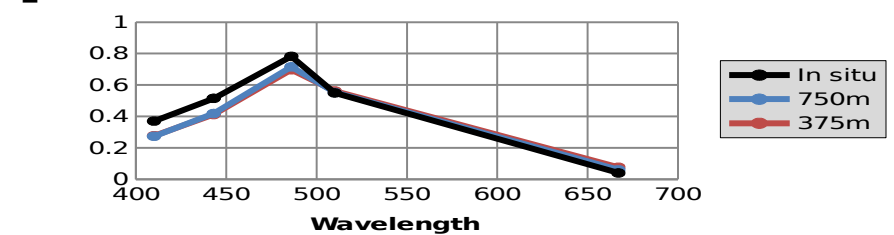
Ondrusek et al. Cal/Val



**9/13/13 - 1820 GMT GEOCAPE**



**9/13/13 - 2020 GMT GEOCAPE**

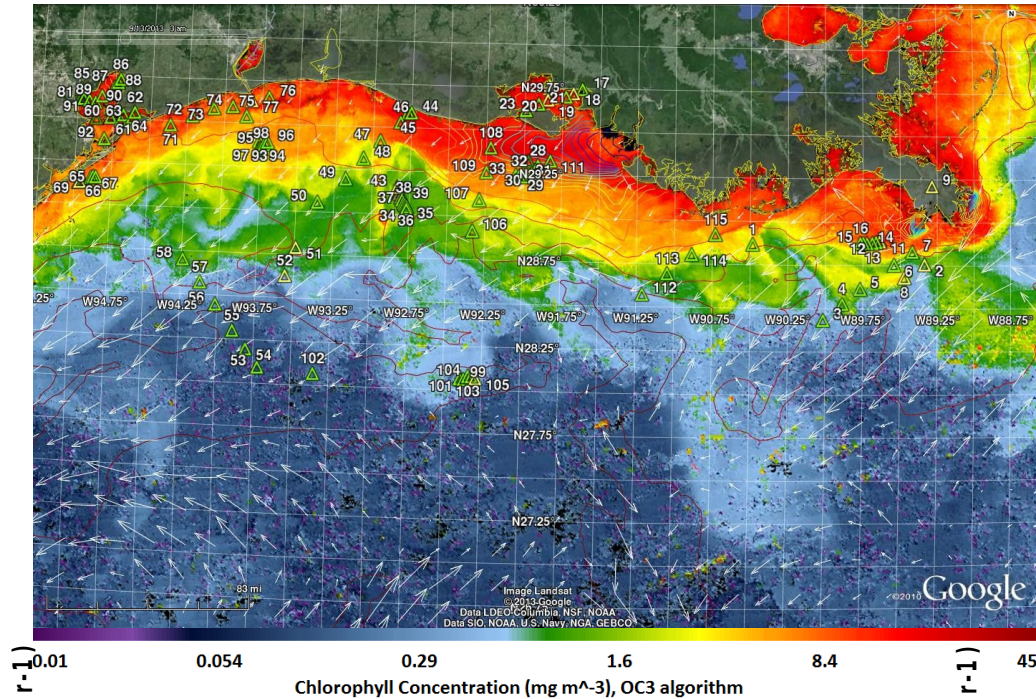




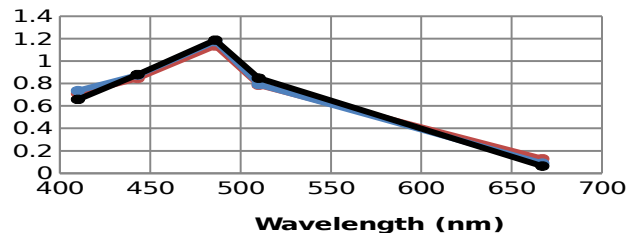
# MATCHUP : Spectral Response

NASA - GEOCAPE  
09/10/13 - 09/22/13

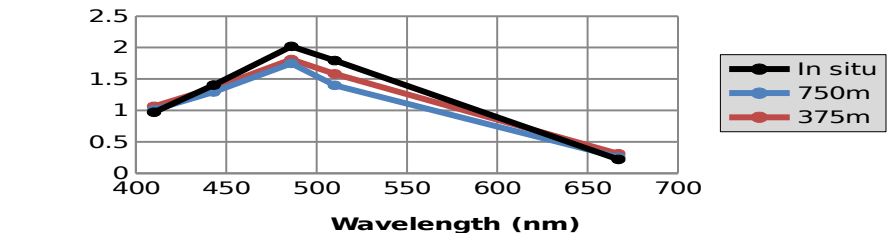
Ondrusek et al. Cal/Val



**9/14/13 - 2031 GMT GEOCAPE**

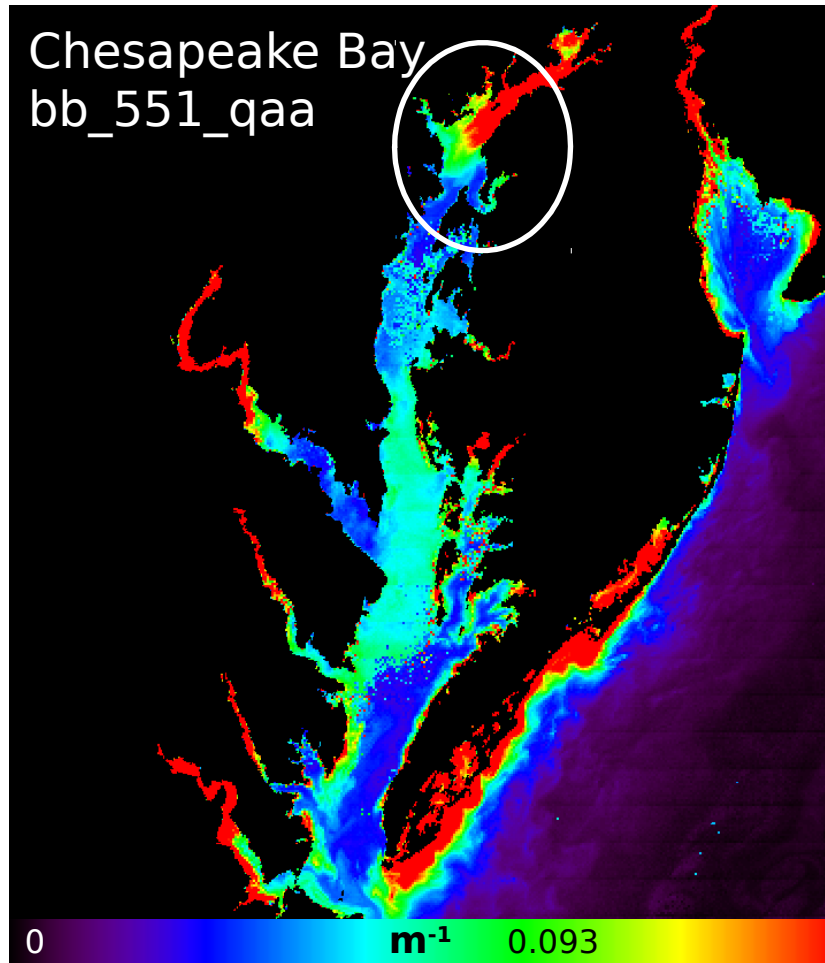


**9/14/13 - 2268 GMT GEOCAPE**



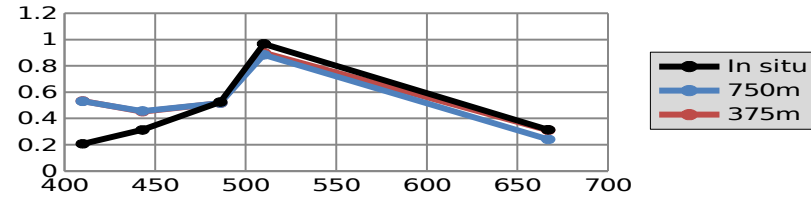
# MATCHUP : Spectral Response

Ondrusek et al.  
Cal/Val



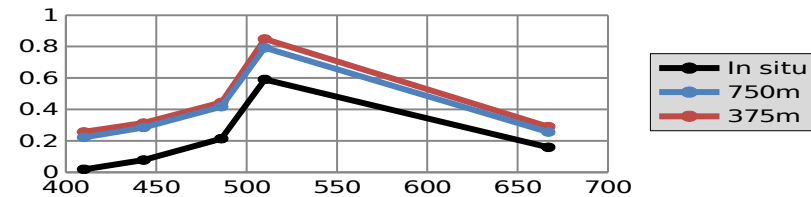
nLw (mW cm<sup>-1</sup> nm<sup>-1</sup>)

8/12/13 - 1644 GMT



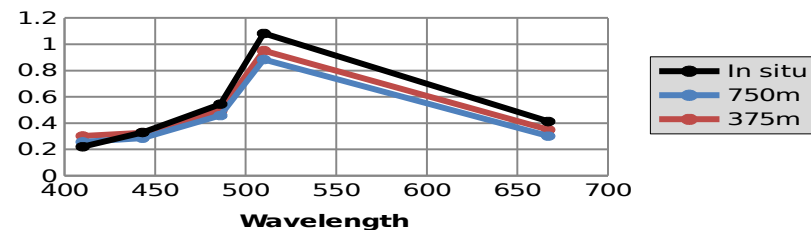
nLw (mW cm<sup>-1</sup> nm<sup>-1</sup>)

8/22/13 - 1916 GMT



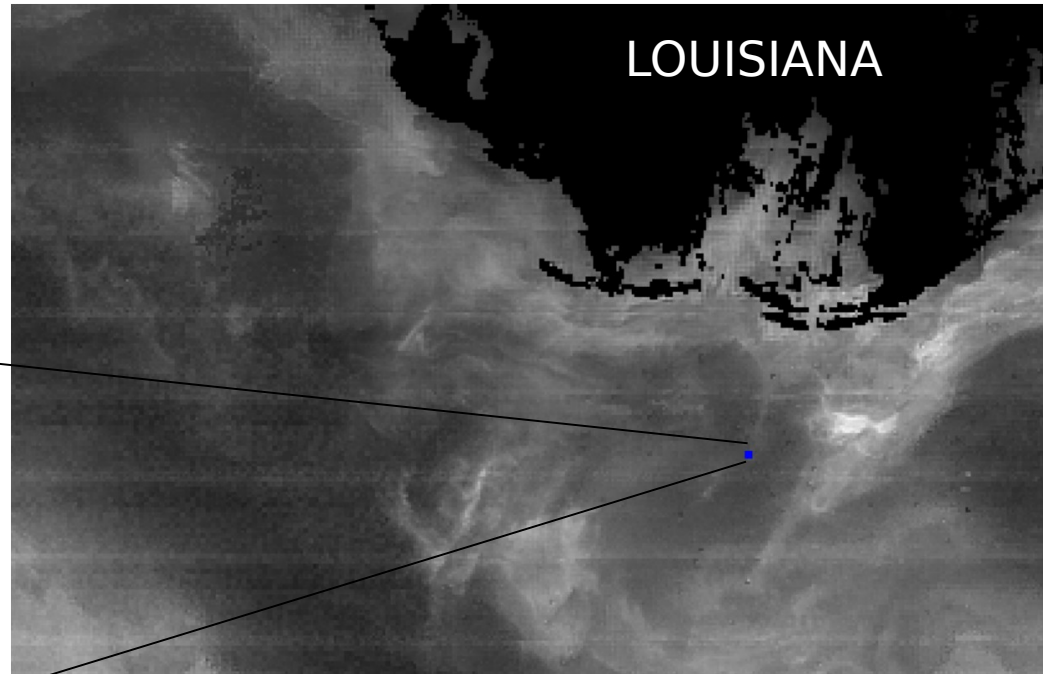
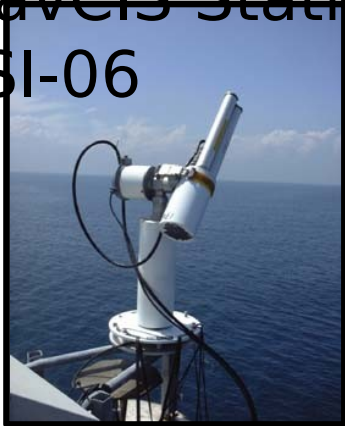
nLw (mW cm<sup>-1</sup> nm<sup>-1</sup>)

8/22/13 - 2004 GMT



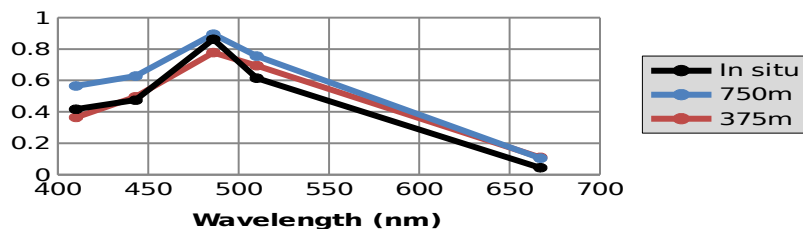
# MATCHUP : Spectral Response

AERONET -  
WavCIS Station  
CSI-06



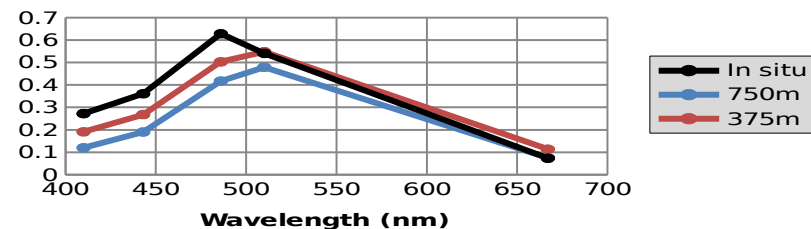
nLw (mW cm<sup>-1</sup> μm<sup>-1</sup> sr<sup>-1</sup>)

**9/14/13 - WCIS average**



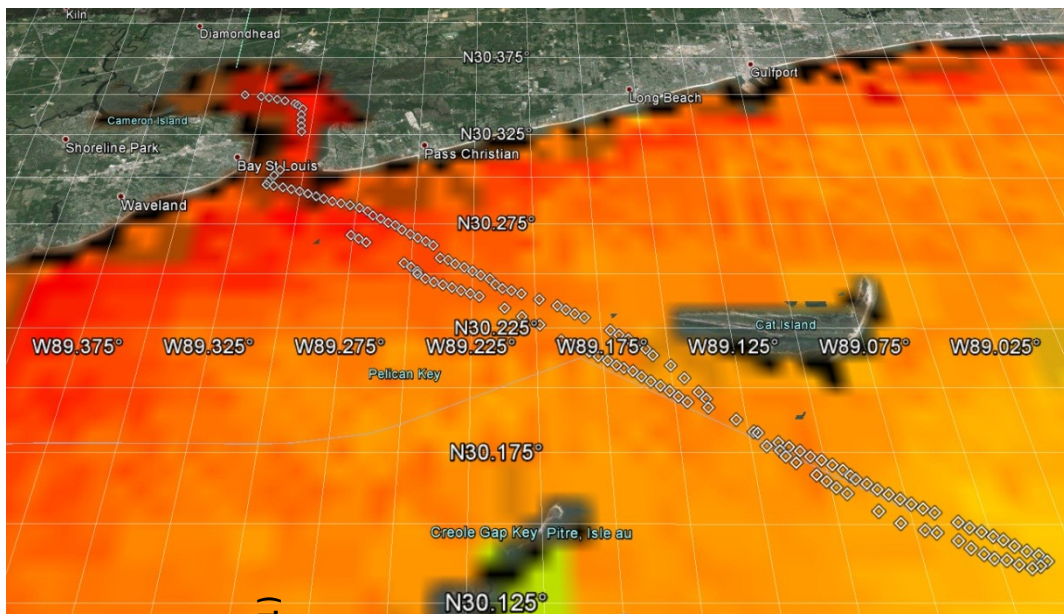
nLw (mW cm<sup>-1</sup> μm<sup>-1</sup> sr<sup>-1</sup>)

**9/26/13 - WCIS average**



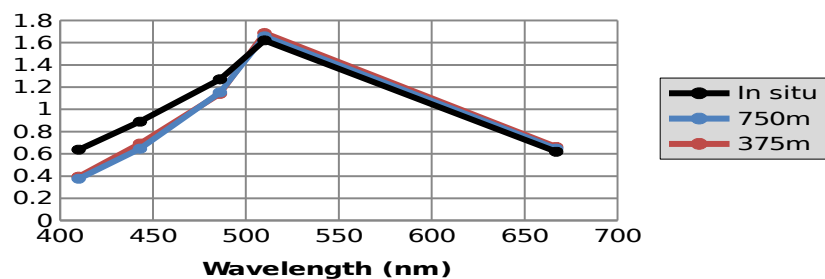
# MATCHUP : Spectral Response

Naval Research  
Lab  
R/V Ocean Color  
11/20/13



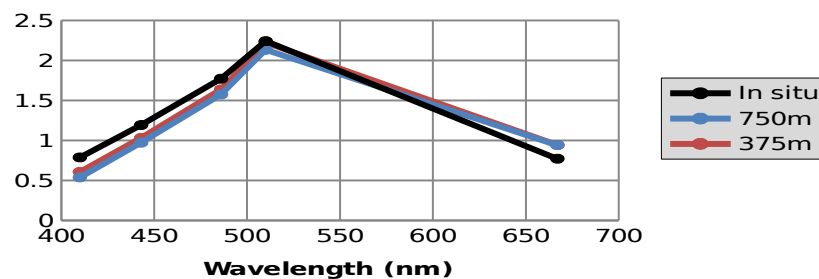
$n_{LW} \text{ (mW cm}^{-1} \text{ um}^{-1} \text{ sr}^{-1})$

**11/20/13 - MS Bight, 1630 GMT**



$n_{LW} \text{ (mW cm}^{-1} \text{ um}^{-1} \text{ sr}^{-1})$

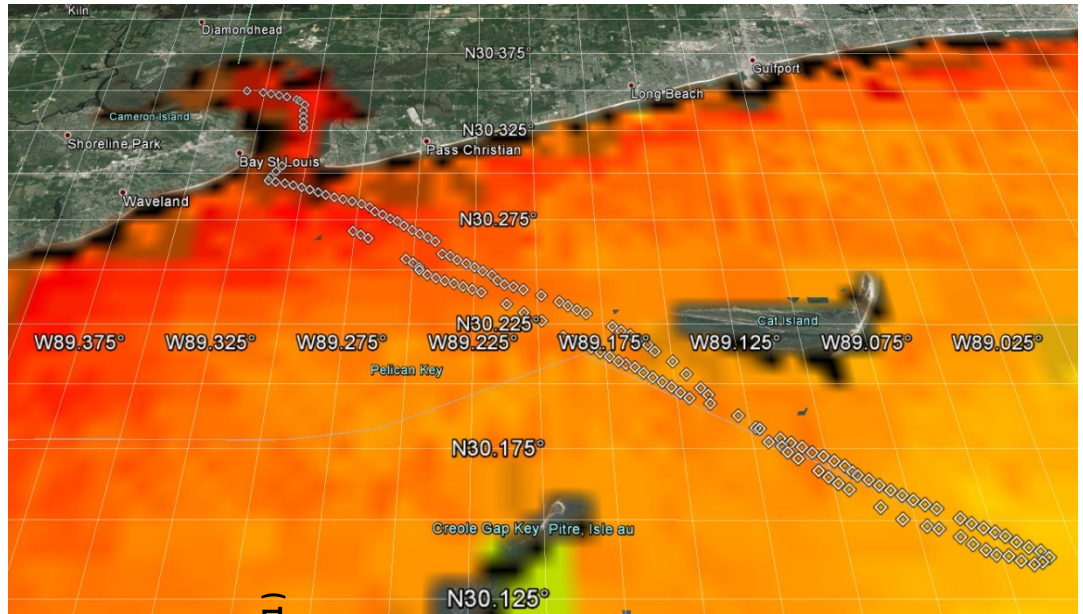
**11/20/13 - MS Bight, 1725 GMT**





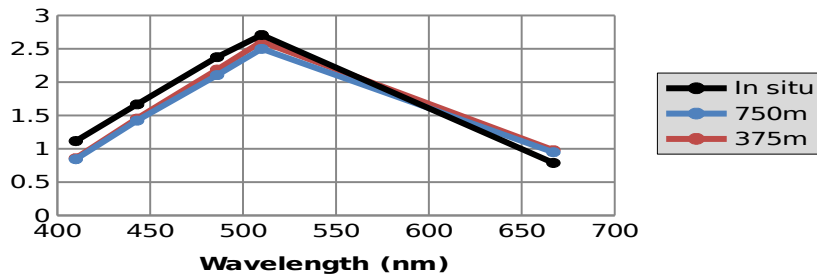
# MATCHUP : Spectral Response

Naval Research  
Lab  
R/V Ocean Color  
11/20/13



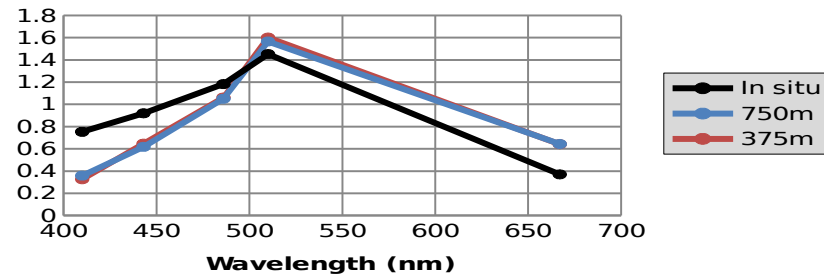
$n_L W \text{ (m W cm}^{-1} \text{ um}^{-1} \text{ sr}^{-1}\text{)}$

**11/20/13 - MS Bight, 1805 GMT**



$n_L W \text{ (m W cm}^{-1} \text{ um}^{-1} \text{ sr}^{-1}\text{)}$

**11/20/13 - MS Bight, 1920 GMT**

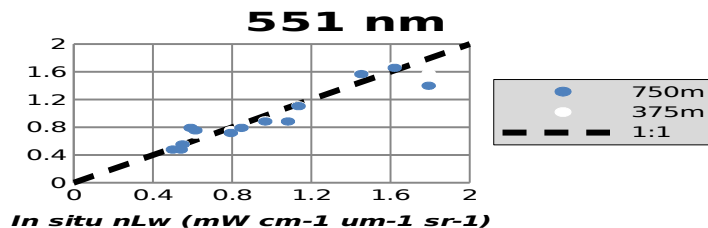
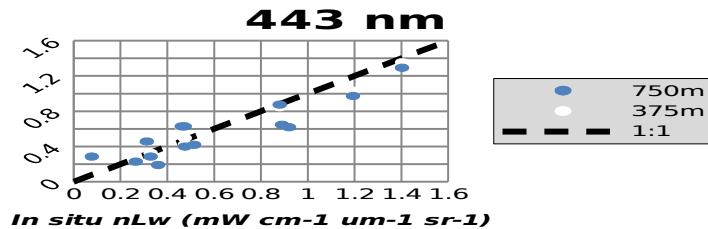




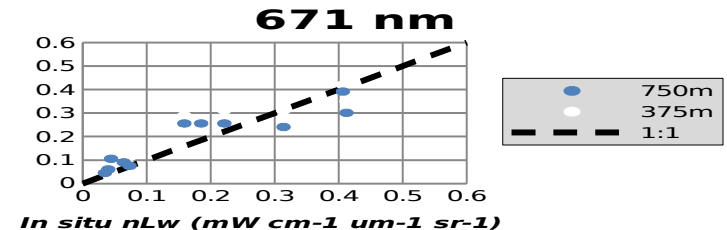
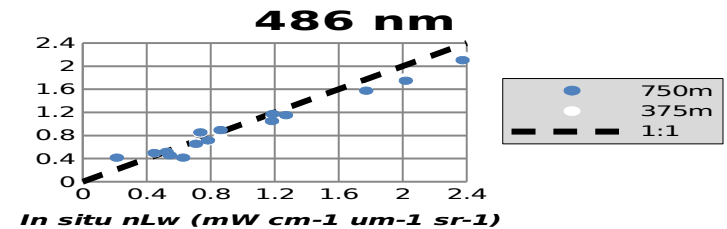
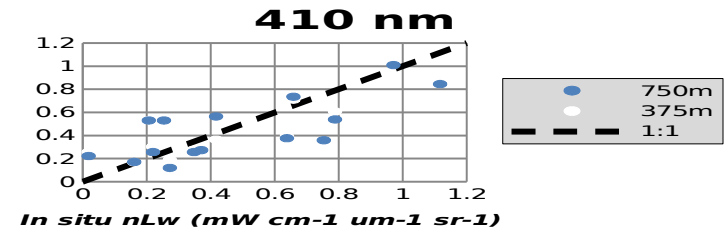
# TOTAL MATCHUPS: 15

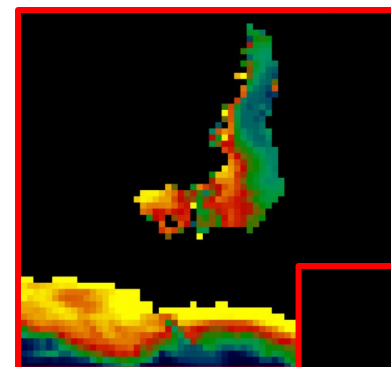
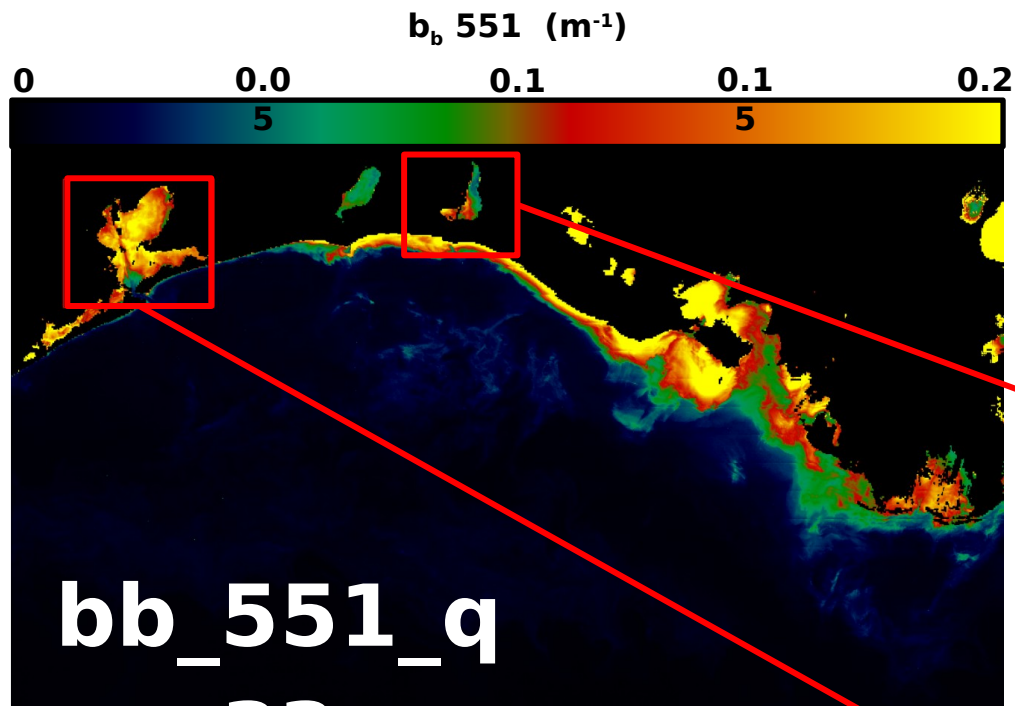
*No significant  
spectral artifacts  
introduced through  
sharpening*

VIIRS nLw (mW cm<sup>-1</sup> um<sup>-1</sup> sr<sup>-1</sup>)

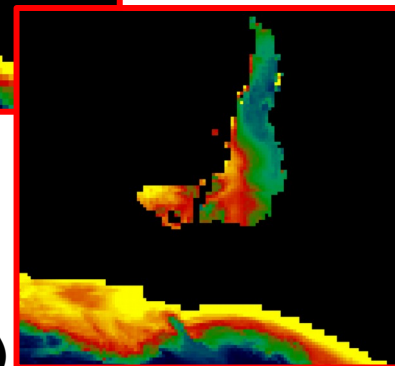


VIIRS nLw (mW cm<sup>-1</sup> um<sup>-1</sup> sr<sup>-1</sup>)

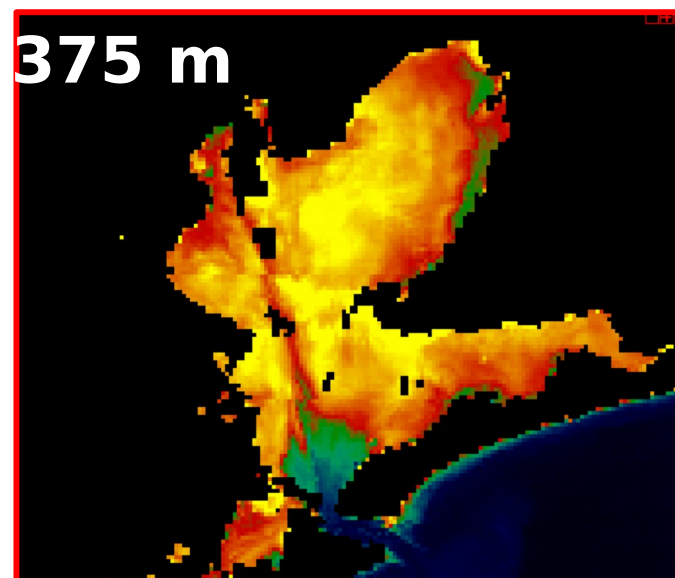
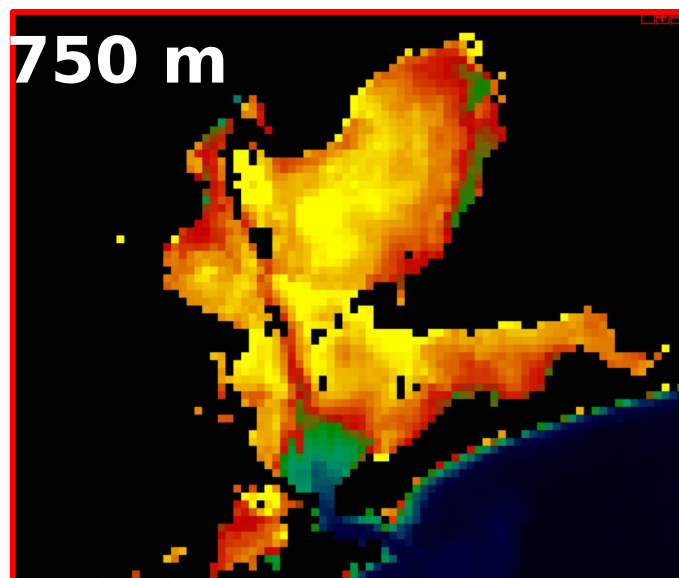




$\leftarrow 750 \text{ m}$   
(standard)



$375 \text{ m}$   
✉  
(sharpened)

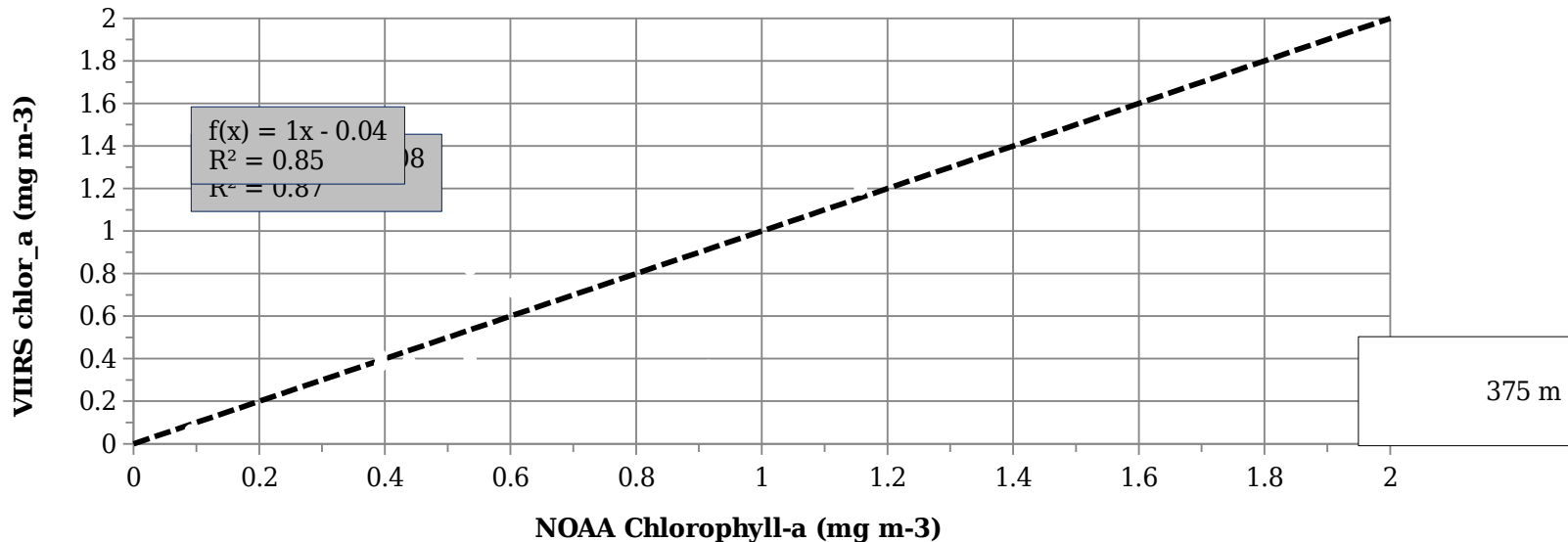
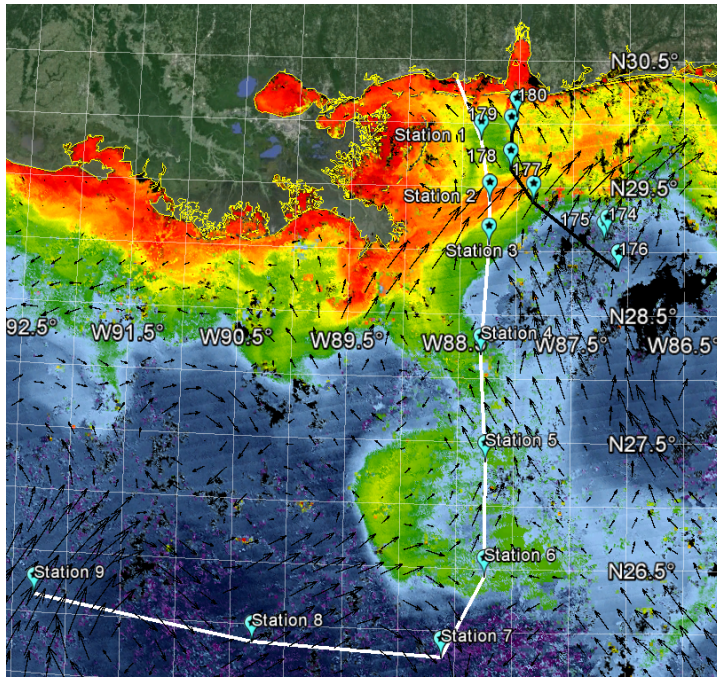


# MATCHUP : TEST RATIO ALGORITHMS

NOAA National Marine  
Fisheries

08/21/13 – 08/23/13 , 09/27/13

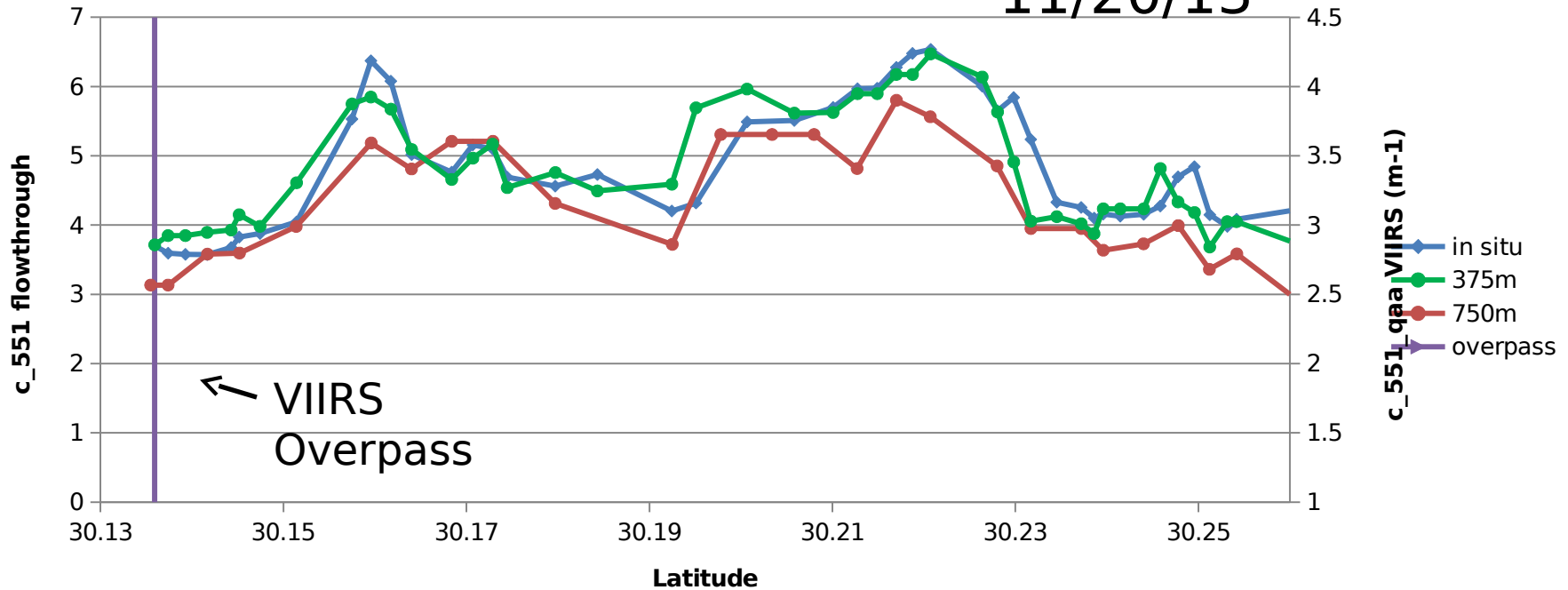
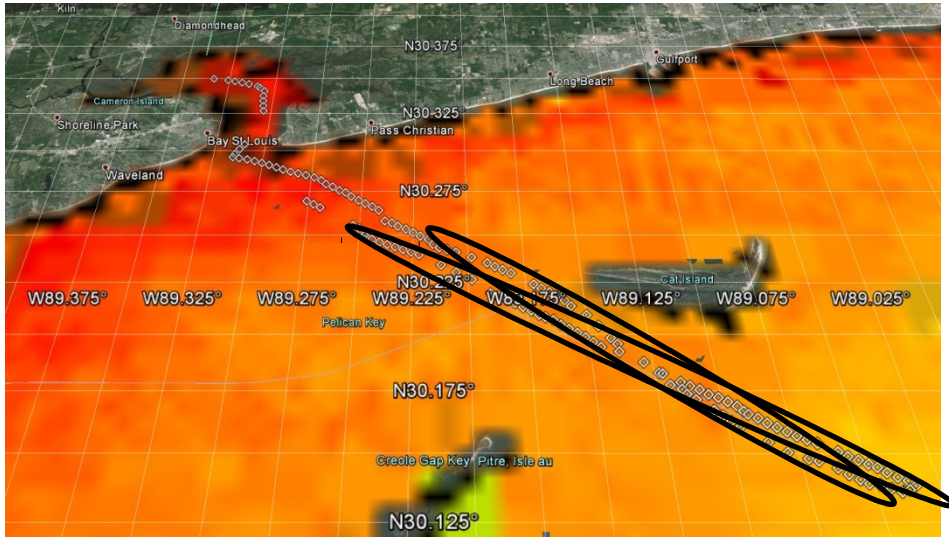
Chlorophyll-a Fluorescence  
**VIIRS (375-m v. 750-m) matchup, APS**



# MATCHUP : TEST FEATURE DETECTION

Naval Research Lab

R/V Ocean Color  
*Flow-through Beam\_C*  
11/20/13

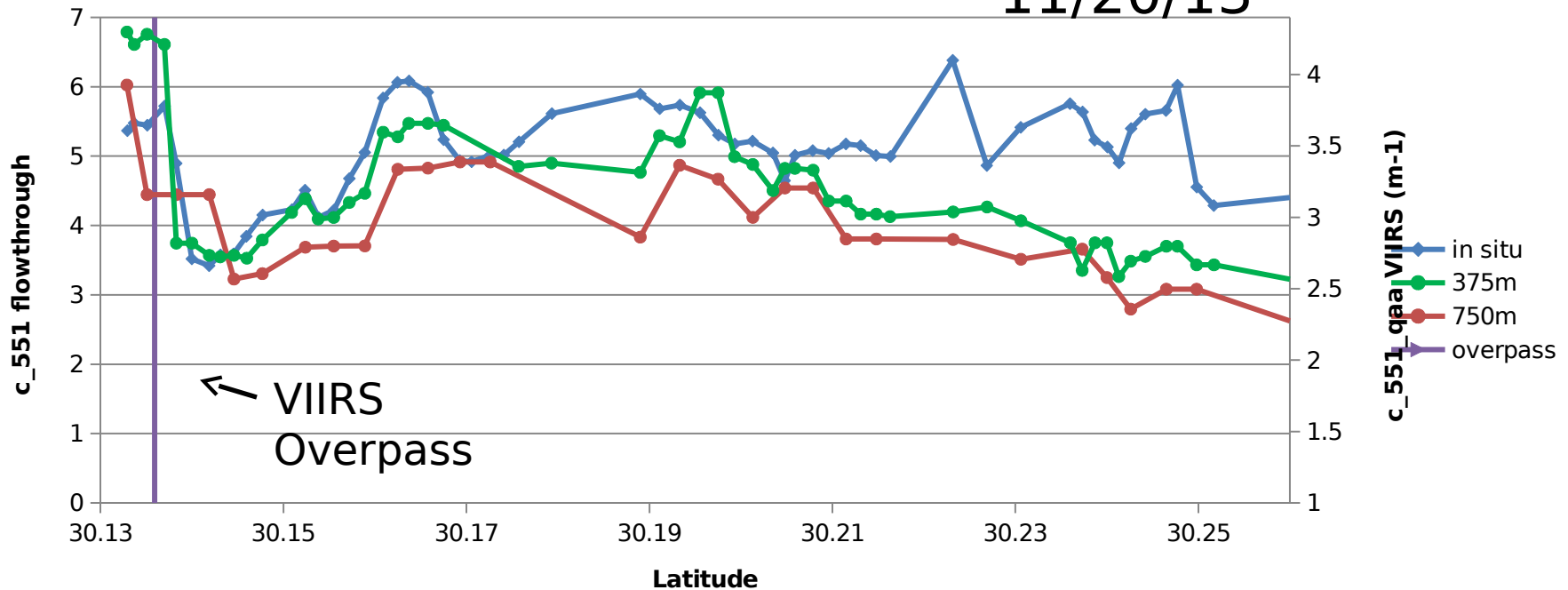
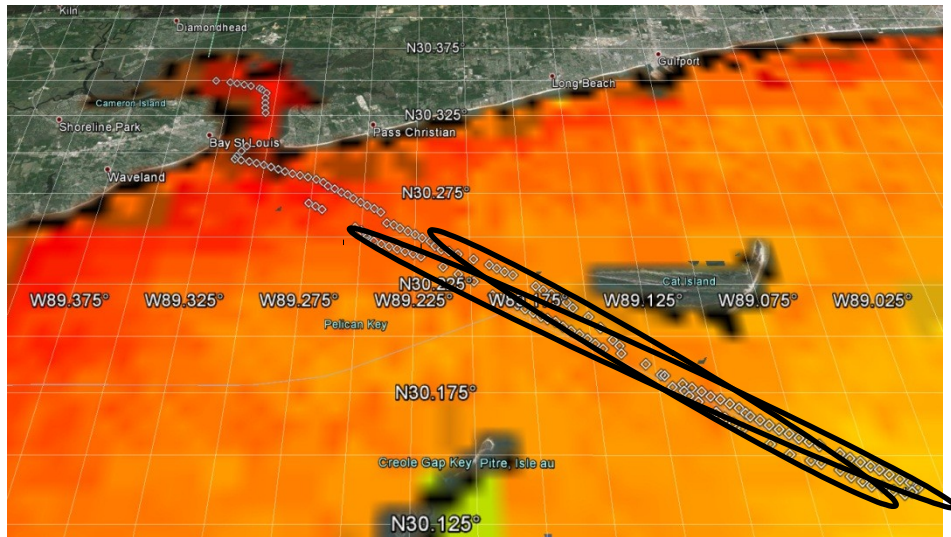




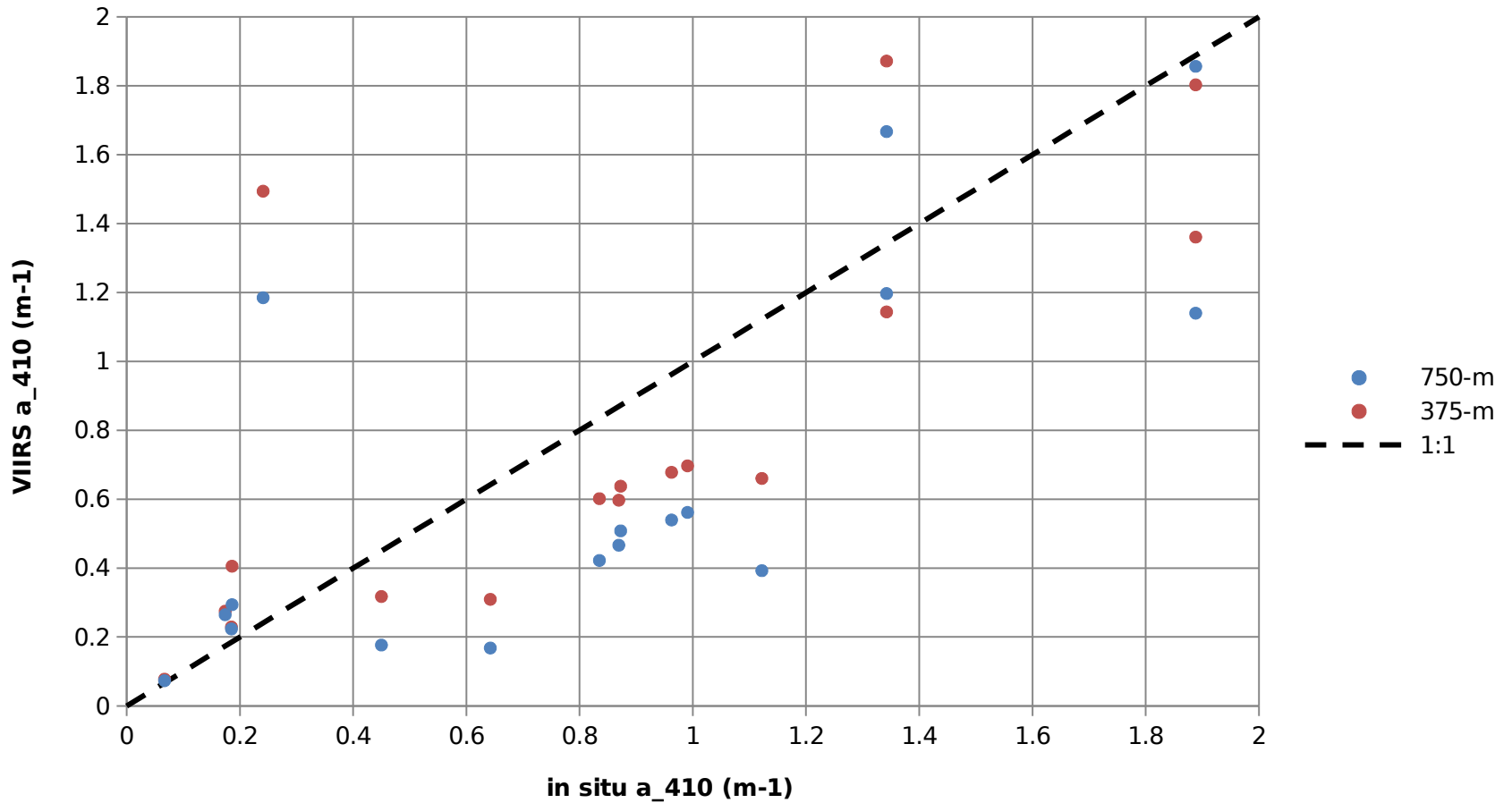
# MATCHUP : TEST FEATURE DETECTION

Naval Research Lab

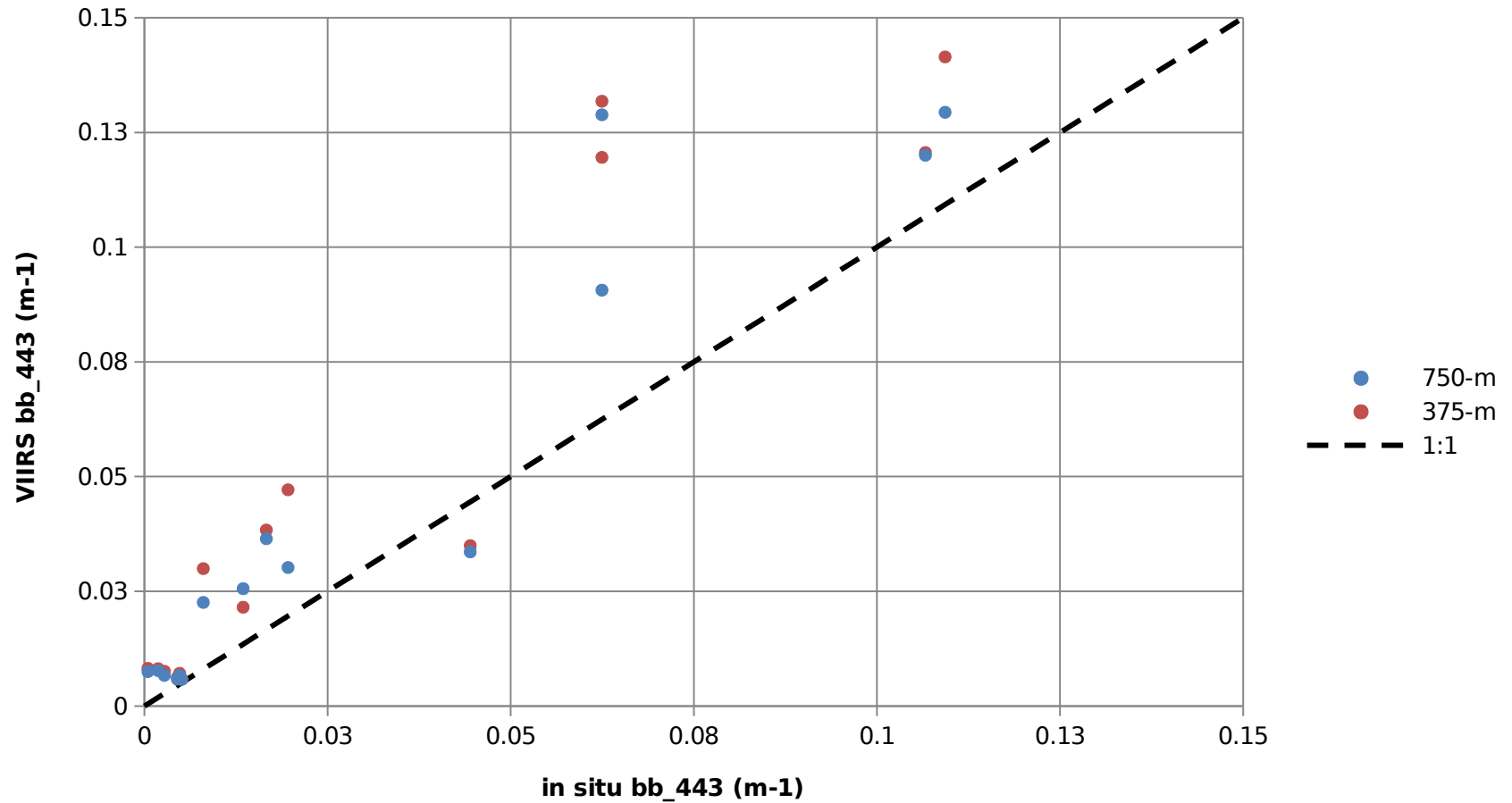
R/V Ocean Color  
*Flow-through Beam\_C*  
11/20/13



# Zhongping Lee a\_410 matchup



# Mike Ondrusek bb\_443 matchup



# Zhonggping Rrs matchups

